Ecological Risk Assessment Support Center, ERASC, Mike Kravitz, ORD

The mission of the ERASC is to

- provide technical information to address scientific questions of concern or interest to ecological risk assessors,
- disseminate tools, methods, and consensus opinions, and
- promote greater consistency on topics that are relevant to ecological risk assessment for OSWER and regional RCRA and Superfund.

The objectives of the ERASC are to

- provide technical information and assess emerging and complex scientific issues that often require innovations, experience and expert judgement (this is accomplished by requesting the expertise of scientists that are located throughout ORD,
- develop responses that reflect the "state of the science" for ecological risk assessment, as well as provide a point of communication, and
- serve as a resource for the identification of data gaps in the future.

The announcement letter for the ERASC has been signed and distributed (Tri-Chairs and regional science liaisons will be carbon copied). The ERASC provides a variety of information and will assist in the development, interpretation, and application of

- tools and methods to integrate characterizations of exposure and effects,
- methods and models to evaluate relative and cumulative ecological risks of chemical, physical, and biological stressors,
- dose response information in ERAs,
- toxicity testing methods,
- bioavailability information for chemicals in different media for different receptors,
- indices of community structure and function,
- short and long term risks of various remedial options,
- predictive models for determining population level effects,
- biomarkers of effects, and
- sampling and analysis methods.

As part of the development of the ERASC, ORD has committed to help SF and RCRA.

Functions of the ERASC:

- The ERASC is governed by an implementation committee, which consists of members from the different divisions in ORD, OSWER and the ERAF Tri-Chairs. The implementation committee will also evaluate the program after the 12-month pilot period.
- The ERASC is supported operationally by an on-site contractor. The ERASC will develop a transparent system for documenting, tracking and distributing all inquiries received, and a reporting mechanism to provide an overview of its activities.
- Requests coming to the ERASC are expected to involve those topics and activities for which ORD offers unique ecological expertise. Based upon evaluation of the nature of and degree of difficulty posed by the request, the Director will determine, who is the most appropriate person to handle the request.

The implementation committee will determine if a product requires a peer review and also the level of peer review required.

Process for addressing technical requests:

- For the initial 12-month pilot period, all requests for technical support should be sent directly to the appropriate Regional eco-toxicologist/risk assessor. Any unanswerable questions should then be directed to the ERASC.
- A table is being added to the web site that lists the current requests and the progress being made. It also provides people an opportunity to propose their ideas on where to find the answers to the questions.

Current requests include:

- Does dredging result in increased environmental risks to aquatic receptors?
  - Technical Leads: Dennis Timberlake, ORD/NRMRL-Cin and Mike Kravitz, ORD/NCEA-Cin
  - Expected outcome: a discussion of the extent, if any, to which resuspension of sediment by dredging leads to greater bioavailability, and therefore, greater toxicity of hydrophobic contaminants to aquatic receptors
  - Expected completion date: peer review draft by July 30, 2001
- What are the non-dioxin-like effects of PCBs and how can they be evaluated in ecological risk assessments?
  - Technical Lead: Tala Henry, ORD/NHEERL-Duluth, assisted by Mike DeVito, ORD/NHEERL-RTP
  - Expected completion date: peer review draft by Dec. 31, 2001
- What information is provided by performing PCB congener analysis? What are the strengths and limitations of different analytical methods?
  - Technical Lead: David Cleverly, ORD/NCEA-Washington (David Cleverly requested a conference call between the NCEA PCB scientists, Mike Kravitz, and the ERAF spokespersons to better define the requests)
- What is the most appropriate method for soil and/or sediment TOC analyses, and what factors should be considered when selecting the method?
  - Technical Lead: Brian Schumacher, ORD/NERL-Las Vegas (pending Division Director approval)
  - Tentative expected completion date: August 31, 2001
- How do we make the connection between individual measurements and population effects, and what do we measure?
  - Technical Group: Wayne Munns, ORD/NHEERL-AED and Sharon Taylor, ORD/NCEA-RTP, and other experts
  - The question was determined to be too broad and, therefore, a hypothetical case study will be used to illustrate the answer. Mike Kravitz, Jim Chapman, and Clarence Callahan will develop a scenario, hypothetical or real, to use to determine the response.
  - ORD and USGS are also currently examining this issue.
  - Expected completion date: to be determined
- The Equilibrium Partitioning Request was completed with a video conference call that was held May 9, 2001. The video from the EqP Conference Call will soon be released to the Regions.

Draft peer review process will involve

- internal peer review by EPA scientists, and then
- external peer review by States, other government agencies, or a contractor. There is a confidentiality agreement on the peer review process.

When a response is prepared, it undergoes an internal ORD review before it is sent for external peer review and review by the ERAF on the website. Many people feel that the ERAF should review the document before it goes out to external peer review. Under the best scenario, it would be the person who submitted the question.

ERASC discussion database categories include

- instructions for use,
- requests and the request background,
- related documents,
- author profiles,
- discussion forum directions,
- ERASC implementation committee conference call agendas,
- ERASC documents, and
- ERASC implementation committee conference call minutes.

A contractor has been developing a database that will be updated periodically which lists the responsibilities of the ORD personnel. It is based on the Technical Assistance Directory from 1997.